

**ABSTRACT**

A vinyl-based polymer having a mass average molecular weight of 1500 to 10000, which is prepared by a first step of continuously feeding a material mixture containing a vinyl-based monomer to a continuous tank type first reactor, and polymerizing the vinyl-based monomer under the conditions of a polymerization temperature of 150° to 300°C and a retention time of 1 to 60 minutes at a rate of polymerization of 50 to 99% to obtain a reaction intermediate mixture; and a second step of feeding a polymerization initiator in the amount of 0.01 to 5 parts by mass based on 100 parts by mass of the vinyl-based monomer and the reaction intermediate mixture to a second reactor, and further polymerizing the vinyl-based monomer under the conditions of a polymerization temperature of 100° to 200°C and a retention time of 10 to 240 minutes at a rate of polymerization of 80% or more.